

Abstract

A friction-welding device for the integral joining of components, having an oscillator, which generates a periodic movement of a component and a welding surface provided thereon relative to another, static component and a welding surface provided thereon, with directions of movement parallel to the welding surfaces, having a compression device which presses the welding surfaces together, and a cartridge which accommodates the moved component.

The oscillator includes two or a greater, even number of piezoactuators, which are arranged in pairs on a line of application and are able to be prestressed with respect to the cartridge from opposite sides under pressure generation and are able to be moved in a synchronous, oscillating manner together therewith and the component.

(Figure 2)